

Petroleum hydrocarbon in surface sediment from coastal area of Putatan and Papar, Sabah

Abstract

Total petroleum hydrocarbons (TPH) and percent total organic carbon (TOC) were investigated in surface sediments from coastal area of Papar and Putatan, Sabah. Samples were collected in five different stations in each area by using Ponar grab sampler. Samples were extracted with Soxhlet, concentrated and analyzed by using UV/VIS spectrophotometer. The overall mean and range of TPH concentrations in the sediments from coastal area of Papar and Putatan were 1.95 (0.53 – 4.59 mg/kg dw Miri crude oil equivalents) and 0.85 (0.26 – 1.64 mg/kg dw Miri crude oil equivalents) respectively. Meanwhile, the TOC ranged from 0.81 – 2.32% and 0.35 – 0.81% respectively. Statistical analysis using Pearson correlation showed no significant differences between TPH and TOC ($p < 0.05$) in both areas.